

AMENDMENT TO THE CLAIMS

Please **AMEND** claims 1, 5, 13, 17, and 19 as follows.

Please **CANCEL** claims 7 and 18 without prejudice or disclaimer.

Please **ADD** claims 21 and 22 as follows.

A copy of all pending claims and a status of the claims is provided below.

1. (currently amended) A system for sequencing products, comprising:
a plurality of input feeding devices each randomly receiving products from a stream of product;
a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the product to a plurality of contiguous output bins of the plurality of output groups; and
a control having a first mode of operation and a second mode of operation for the first pass phase and the second pass phase, respectively, wherein
in the first mode, the control allows all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase, and
in the second mode, the control constrains placement of the products to output groups assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase,
wherein the control maintains a same grouping of contiguous output bins between the first pass phase and the second pass phase.
2. (original) The system of claim 1, wherein the control, in the first mode, allows the products fed from any of the plurality of input feeding devices access to any output group of the plurality of output groups based on a code of the products.
3. (original) The system of claim 1, wherein the control assigns each input feeding device to an associated particular output group of the plurality of output groups.

4. (original) The system of claim 3, wherein the products, in the second pass phase, are fed through each of the assigned input device to each of the associated particular output group.

5. (currently amended) The system of claim 1, wherein each of the assigned output groups has a plurality of contiguous ones of the output bins such that, in the second pass phase, the products placed in the contiguous output bins of the each associated assigned output groups are fed to the each corresponding assigned input feeding device in a sequential order of the contiguous output bins in the each assigned output groups.

6. (original) The system of claim 1, wherein the plurality of input devices is equal to the plurality of output groups.

7. (canceled)

8. (original) The system of claim 1, wherein the control constrains each of the input feeding devices, on the second pass phase, to feeding product, received from a previously assigned output group maintained from the first pass phase, to a same output group in the second pass phase.

9. (original) The system of claim 1, wherein the each output group of the plurality of output groups is designated for a number of routes.

10. (original) The system of claim 1, wherein the plurality of input feeding devices is at least two input feeding devices.

11. (original) The system of claim 1, wherein the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices.

12. (original) The system of claim 1, wherein the products are mail pieces.

13. (currently amended) A system for sequencing products, comprising:
a plurality of input feeding devices each randomly receiving products from a stream of product;
a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the products to output bins of the plurality of output groups; and
a control allowing all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase and assigning contiguous output bins to predetermined output groups of the plurality of output groups and associating each of the predetermined output groups with respective input feeding devices such that the predetermined output groups remain constant between the first pass phase and the second pass phase,
wherein the contiguous output bins are one of touching and adjacent.

14. (original) The system of claim 13, wherein the control constrains placement of the products to the predetermined output groups assigned in the first pass phase during the second pass phase such that the groupings of the products remain constant between the first pass phase and the second pass phase.

15. (original) The system of claim 13, wherein the products, in the second pass phase, are fed through the respective input feeding devices to the associated predetermined output groups.

16. (original) The system of claim 13, wherein the products are mail pieces.

17. (currently amended) A method of sequencing product, comprising the steps of:
providing a plurality of product from a stream of product to any of a plurality of input devices;

feeding each of the plurality of product, in a first pass phase, to an assigned group of contiguous output bins of a plurality of output groups based on a code associated with the each of the product, the plurality of product being fed by the plurality of input devices; and

assigning each of the plurality of input devices to each of the assigned group of contiguous output bins; and

constraining placement of the plurality of product during a second pass phase to the assigned group of contiguous output bins such that the assigned group of contiguous output bins remain constant between the first pass phase and a second pass phase.

18. (canceled)

19. (currently amended) The method of claim 17, further comprising assigning each of the plurality of input devices to feed product of the plurality of product, during the second sort phase, to each of the assigned group of contiguous output bins.

20. (original) The method of claim 17, wherein the plurality of products are mail pieces.

21. (new) The method of claim 1, wherein each of the plurality of input feeding devices comprises a pause device, an inserter, and an optical reader, all communicating with and controlled by the control.

22. (new) The method of claim 13, wherein each of the plurality of input feeding devices comprises a pause device, an inserter, and an optical reader, all communicating with and controlled by the control.